

Appl. No. 10/667,878
Atty. Docket No. CM2517M2C
Amdt. dated 28-Sep-2006
Reply to Office Action of 28-Mar-2006
Customer No. 27752

RECEIVED
CENTRAL FAX CENTER
SEP 28 2006

AMENDMENTS TO THE CLAIMS

This listing of claims will replace all prior versions, and listings, of claims in the application:

1. (Canceled)
2. (Canceled)
3. (Canceled)
4. (Canceled)
5. (Canceled)
6. (Canceled)
7. (Canceled)
8. (Canceled)
9. (Canceled)
10. (Previously Presented) A composition according to claim 19, wherein said composition is in the form of an oil-in-water emulsion.
11. (Previously Presented) A composition according to claim 19, wherein said composition is in the form of a thickened aqueous solution.
12. (Canceled)
13. (Canceled)

Appl. No. 10/667,878
Atty. Docket No. CM2517M2C
Amdt. dated 28-Sep-2006
Reply to Office Action of 28-Mar-2006
Customer No. 27752

14. (Canceled)
15. (Canceled)
16. (Canceled)
17. (Canceled)
18. (Canceled)
19. (Currently Amended) A composition suitable for treating hair comprising:
 - a) an oxidizing agent; and
 - b) a chelant (L) having a $\frac{\log K_{CuL}}{\log K_{CaL}}$ ratio calculated at pH 10 of at least about 3.20, wherein $\log K_{CuL}$ is the common logarithm of the Conditional Stability Constant of said chelant with Cu^{2+} and $\log K_{CaL}$ is the common logarithm of the Conditional Stability Constant of said chelant with Ca^{2+} ;
wherein said chelant is an aminocarboxylic acid chelant selected from the group consisting of ethylenediamine-N,N'-disuccinic acid (EDDS), ethylenediamine-N,N'-diglutamic acid (EDDG), 2-hydroxypropylenediamine-N,N'-disuccinic acid (HPDDS), glycylamide-N,N'-disuccinic acid (GADS), ethylenediamine-N,N'-bis(ortho-hydroxyphenyl acetic acid) (EDDHA), and salts thereof, derivatives thereof and mixtures thereof; and
wherein said chelant is in an amount sufficient to provide a Normalized Shine Ratio of at least about 0.95 as measured by the Goniophotometer Damage Assessing Protocol after a 5-Cycle Hair Oxidative Treatment Protocol With 10 Intermediate Washes.
20. (Canceled)
21. (Previously Presented) A composition according to claim 19, wherein said chelant (L) has a Hydrogen Peroxide Decomposition Ratio (% Loss) of less than about

Appl. No. 10/667,878
Atty. Docket No. CM2517M2C
Amdt. dated 28-Sep-2006
Reply to Office Action of 28-Mar-2006
Customer No. 27752

10% as measured by the Hydrogen Peroxide Decomposition Ratio Measurement Protocol.

22. (Previously Presented) A composition according to claim 19, wherein said chelant (L) is capable of forming a hexadendate complex with Cu^{2+} .
23. (Canceled)
24. (Canceled)
25. (Canceled)
26. (Original) A composition according to claim 19, wherein said oxidizing agent is present at a level of from about 0.1% to about 40% by weight of the composition and is selected from water-soluble oxidizing agents and mixtures thereof.
27. (Original) A composition according to claim 19, further comprising at least one oxidative hair dye precursor.
28. (Currently Amended) A method of treating hair, said method comprising the steps of:
- i) applying a first composition comprising an oxidizing agent;
 - ii) applying a second composition comprising a chelant (L) having a $\frac{\log K_{\text{CuL}}}{\log K_{\text{CaL}}}$ ratio calculated at pH 10 of at least about 3.20, wherein $\log K_{\text{CuL}}$ is the common logarithm of the Conditional Stability Constant of said chelant with Cu^{2+} and $\log K_{\text{CaL}}$ is the common logarithm of the Conditional Stability Constant of said chelant with Ca^{2+} [[.]]:
- wherein said chelant is an aminocarboxylic acid chelant selected from the group consisting of ethylenediamine-N,N'-disuccinic acid (EDDS), ethylenediamine-N,N'-diglutamic acid (EDDG), 2-hydroxypropylenediamine-N,N'-disuccinic acid (HPDDS), glycylamide-

Appl. No. 10/667,878
Atty. Docket No. CM2517M2C
Amdt. dated 28-Sep-2006
Reply to Office Action of 28-Mar-2006
Customer No. 27752

N,N'-disuccinic acid (GADS), ethylenediamine-N,N'-bis(ortho-hydroxyphenyl acetic acid) (EDDHA), and salts thereof, derivatives thereof and mixtures thereof; and

wherein said chelant is in an amount sufficient to provide a Normalized Shine Ratio of at least about 0.95 as measured by the Goniophotometer Damage Assessing Protocol after a 5-Cycle Hair Oxidative Treatment Protocol With 10 Intermediate Washes; and

iii) applying a third composition comprising a second oxidizing agent; and

wherein steps i) and iii) are separated by at least 1 day and step ii) does not take place immediately before step iii).

29. (Original) A kit for dyeing hair comprising a first and a second compositions packaged in different containers, wherein said first composition comprises an oxidizing agent and said second composition comprises an oxidative dye precursor, wherein the resulting mixture of said first and second compositions is a composition according to claim 27.
30. (Original) A method of dyeing human hair, said method comprising the steps of:
- i) mixing the first and second composition of a kit according to claim 29;
 - ii) applying the mixture obtained after step i) to hair;
 - iii) massaging said mixture into hair;
 - iv) retaining said mixture on the hair for an amount of time sufficient for mixture to dye the hair;
 - iv) rinsing off said composition with water.
31. (Previously Presented) A composition according to claim 19, wherein said composition has a pH from about 8 to about 12.
32. (Currently Amended) A method of treating hair, said method comprising the steps of:

Appl. No. 10/667,878
Atty. Docket No. CM2517M2C
Amtd. dated 28-Sep-2006
Reply to Office Action of 28-Mar-2006
Customer No. 27752

i) applying to the hair a first composition comprising a chelant (L) having a $\frac{\log K_{CuL}}{\log K_{CaL}}$ ratio calculated at pH 10 of at least about 3.20, wherein

$\log K_{CuL}$ is the common logarithm of the Conditional Stability Constant of said chelant with Cu^{2+} and $\log K_{CaL}$ is the common logarithm of the Conditional Stability Constant of said chelant with Ca^{2+} [[.]]:

wherein said chelant is an aminocarboxylic acid chelant selected from the group consisting of ethylenediamine-N,N'-disuccinic acid (EDDS), ethylenediamine-N,N'-diglutamic acid (EDDG), 2-hydroxypropylenediamine-N,N'-disuccinic acid (HPDDS), glycylamide-N,N'-disuccinic acid (GADS), ethylenediamine-N,N'-bis(ortho-hydroxyphenyl acetic acid) (EDDHA), and salts thereof, derivatives thereof and mixtures thereof; and

wherein said chelant is in an amount sufficient to provide a Normalized Shine Ratio of at least about 0.95 as measured by the Goniophotometer Damage Assessing Protocol after a 5-Cycle Hair Oxidative Treatment Protocol With 10 Intermediate Washes; and

ii) applying to the hair a second composition comprising an oxidizing agent;

wherein step i) takes place before step ii).

33. (Previously Presented) A method of treating hair according to claim 32, wherein step i) takes place immediately before step ii).

34. (Previously Presented) A method of treating hair according to claim 32, wherein said first composition is not rinsed off the hair before said second composition is applied to the hair.

35. (Currently Amended) A kit for treating hair comprising:

i) a first separately packaged composition comprising a chelant (L) having a $\frac{\log K_{CuL}}{\log K_{CaL}}$ ratio calculated at pH 10 of at least about 3.20, wherein $\log K_{CuL}$ is the

Appl. No. 10/667,878
Atty. Docket No. CM2517M2C
Amdt. dated 28-Sep-2006
Reply to Office Action of 28-Mar-2006
Customer No. 27752

common logarithm of the Conditional Stability Constant of said chelant with Cu^{2+} and $\log K_{\text{CaL}}$ is the common logarithm of the Conditional Stability Constant of said chelant with Ca^{2+} [[.]];

wherein said chelant is an aminocarboxylic acid chelant selected from the group consisting of ethylenediamine-N,N'-disuccinic acid (EDDS), ethylenediamine-N,N'-diglutamic acid (EDDG), 2-hydroxypropylenediamine-N,N'-disuccinic acid (HPDDS), glycylglycyl-L-proline-N,N'-disuccinic acid (GADS), ethylenediamine-N,N'-bis(ortho-hydroxyphenyl acetic acid) (EDDHA), and salts thereof, derivatives thereof and mixtures thereof; and

wherein said chelant is in an amount sufficient to provide a Normalized Shine Ratio of at least about 0.95 as measured by the Goniophotometer Damage Assessing Protocol after a 5-Cycle Hair Oxidative Treatment Protocol With 10 Intermediate Washes; and

ii) a second separately packaged composition comprising an oxidizing agent.